

Dear Solderer,

The following pages are three different versions of fourses modules, as appearing in Ieaskul F. Mobenthey's line of Eurorack modules under the same name. They are based on the idea of four oscillators that bounce off of each other, creating animalistic noises, not unlike an old mare dying. It was originally sold as a kit by Ciat-Lonbarde, featuring wooden case, speaker amplifier, two fourses modules, and an intersexon. The intersexon is a sort of connecting tissue, that samples-and-holds one fourses module against another, and does current mirroring to create multiplicative, stepped vectors relating each to the other, expanding the amount of workable synthesis nodes on the face of the box. Ieaskul does not concentrate on intersexon because there is a robust array of Eurorack modules that can simulate this function, and also the idea of current outputs is not compatible with that format. Also, just one fourses module can do a lot of different sounds by itself.

Paper circuits are for misophonia therapies, by imitating the sounds of mylar chips bags crackling and crunchy jaw sounds. This is sandrodal synthesis. Put simply: they are all androgynous nodes, that can be both input and output. There are about five kinds of "boild sandrodes" available in these papers: the extensive squiggler, checkpoint, intensive tanquard, currentplace, and councillor. The squiggler is for connecting the oscillators to each other as reference points. The checker point is static in a DC way, but it can be affected by the other sandrodes. The tanquard brings forth internal operations of the oscillators: positive (hysteresis) feedback, and negative (sloper) feedback, for weaving with all the other sandrodes. A currentplace is had on the outputs of the intersexon, and technically it is not androgynous, but it is contingent nevertheless on the input it is connected to. A councillor is a further internal operation of the oscillator, signalling upward or downward operation.

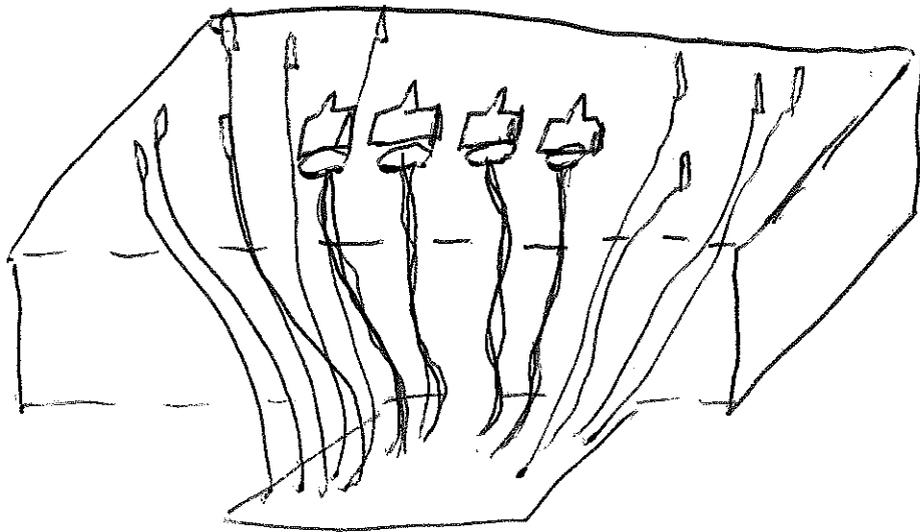
Since any node can be an output in this way, you will need to construct a grounded output jack with brass node as a "listener" for to hear it all. Or, you can use the speaker amplifier built into the intersexon. It is recommended you just make one fourses "tarp" first and make that work, then try the other two fourses, and finally integrate them with the intersexon. To wire to the intersexon: put two fourses flanking it, and connect their "interconnection nodes" as labeled to the ones on the cartouche. Finally, there is the spesal cuck, another node that can be used to starve the power supply. You would connect a nine volt battery to the intersexon board, and from there, give power to the fourses board, and now they are slaved to the whims of the cuck. There are two ways of using these papers: encasing it in a big wine box, with the pots three-wired out on tassles, and the nodes penetrating the box, and pizzaboxing, which means leaving the circuit open-faced with knobs pointing up and sandrodes coming out to the side on a piece of wood.

There are three circuits represented here: Fourses Tarp, Fourses Arpserge, and Fourses Tarpterge. Tarp has two arp exponential converters as the modulation input; it is closest to classic operation. Arpserge has one arp and on serge differential pair, another way of modulation input. And tarpterge has two arp exponential converters and two serge differential pairs, a final option. They were all evaluated and heard to be quite similar, but of course a little bit different, thus they are all presented here. Ieaskul ended up using a design optimized for Eurorack, with +12 and -12 power supply, but it is very similar in idea to Fourses Tarp. Note that the Fourses Tarp in these papers does not interface with the intersexon, because it has no "castle cuck" node.

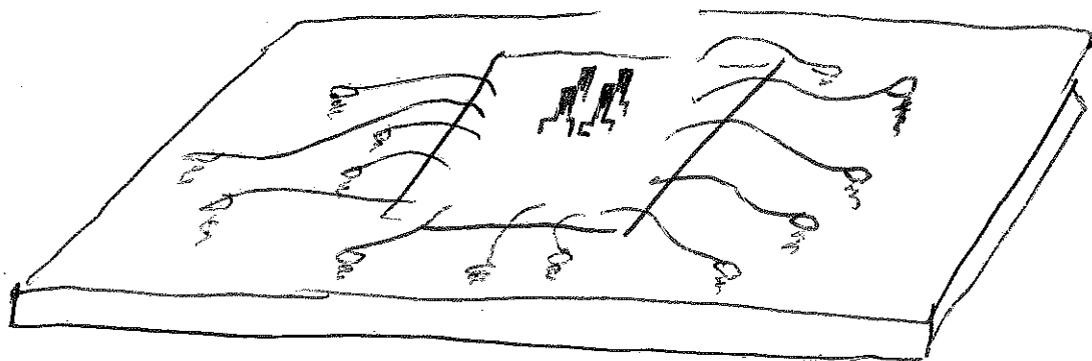
To do these circuits, you really should go through the others, such as Lil Sidrassi and Mister Grassi, but there is a review page for your information. The only thing really new here is using pots on paper. They are Alps pots, and should be firmly wired in, but as I said, you could take their three wiper points and wire out to any kind of pot (linear) you want on the case. When you print these out, make sure scale is 100%, and not fit to page!

Thanks for Solderworking!

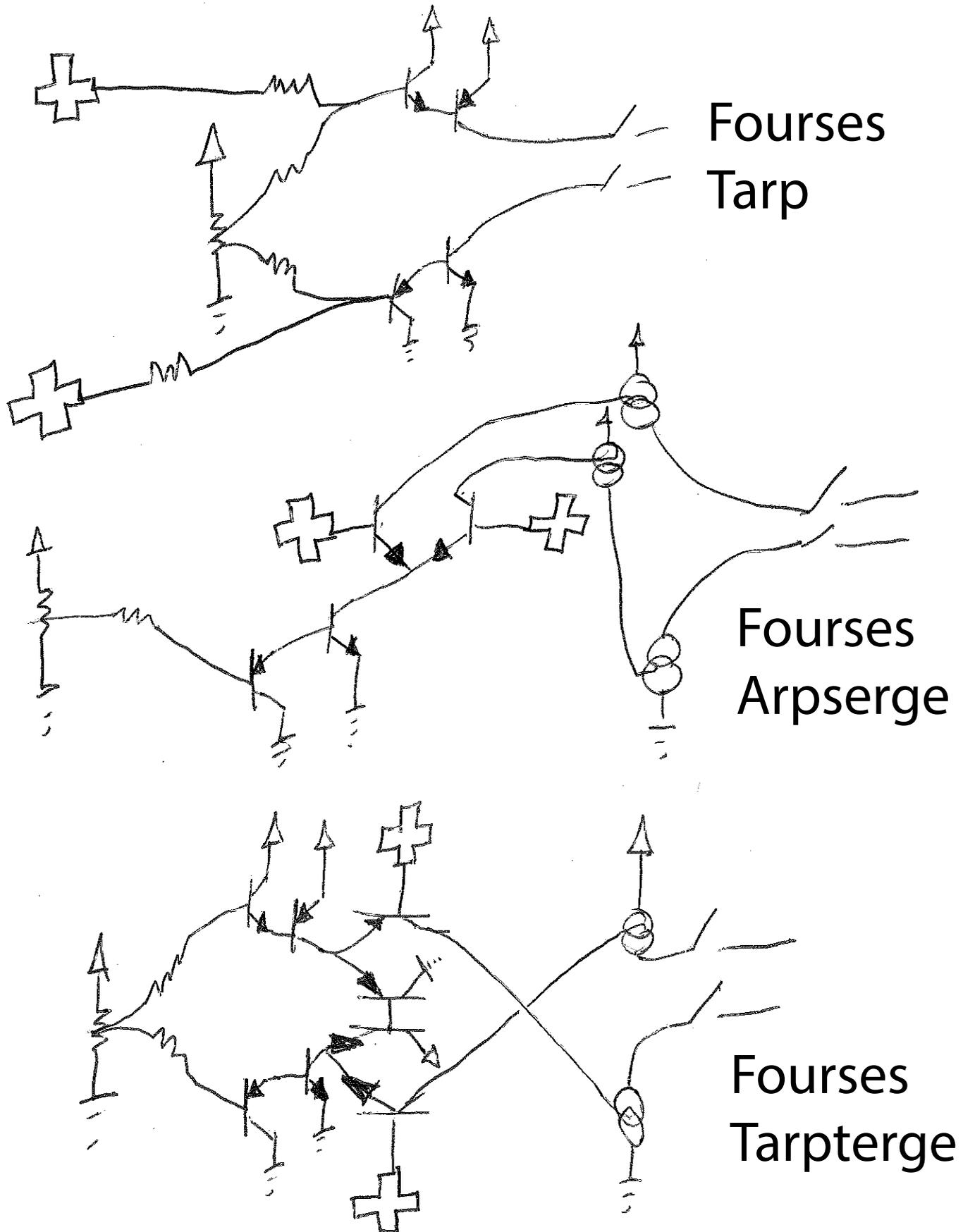
Peter B



Encasing



Pizzaboxing



Fourses
Tarp

Fourses
Arpserge

Fourses
Tarpterge

The Three Modulation Schemes

INTERCONNECTION NODES

-  WIGGLER HARD OUT
-  STABB COUNCILLOR
-  CASTLE CUCK

BOILD SANDRODES

-  EXTENSIVE SQUIGGLER
-  CHECKERPOINT
-  INTENSIVE TANGUARD
-  CURRENTPLACE
-  COUNCILLOR
-  SPESAL CUCK
-  TRANSOB POST
AMPLIFIER INPUT

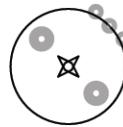
 9VOLT BATSNAP OBELISK
OR INPUT FROM CUCK POWER

 100 OHM SPEAKER

 DIODE 1N914 1N4148

 VP2106 MOSFET

 CUCK POWER OUTPUT



ALPS POT
RK09K1130ACL
RK09D1130A1L
RK09K1130ACM
RK09D1130A1M



LED TEETH TO KATHODE



TYPICAL RESISTOR



JUNCTION WIRE



PNP BC559 OR SIMILAR



NPN BC549 OR SIMILAR



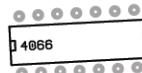
105 POLY CAP



103 POLY CAP



102 POLY CAP
OR CHOOSE YOUR OWN ADVENTURE



CD4066 QUAD SWITCH



LM324

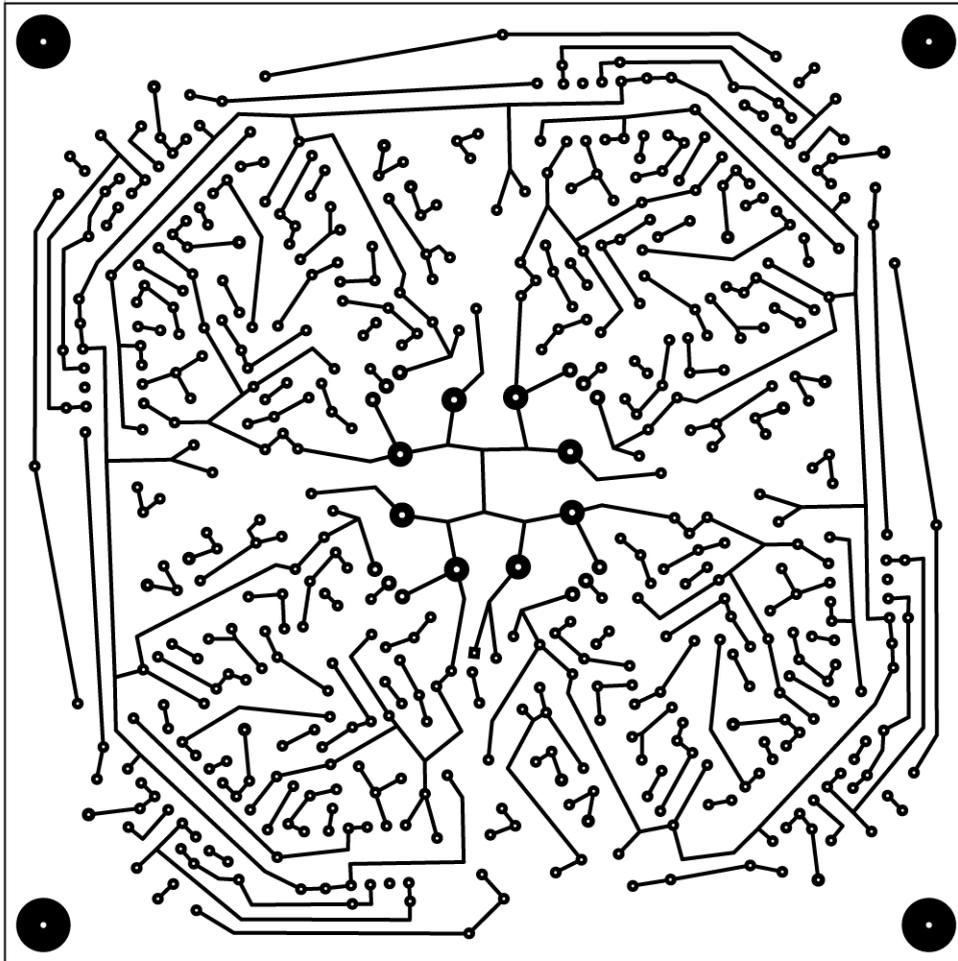
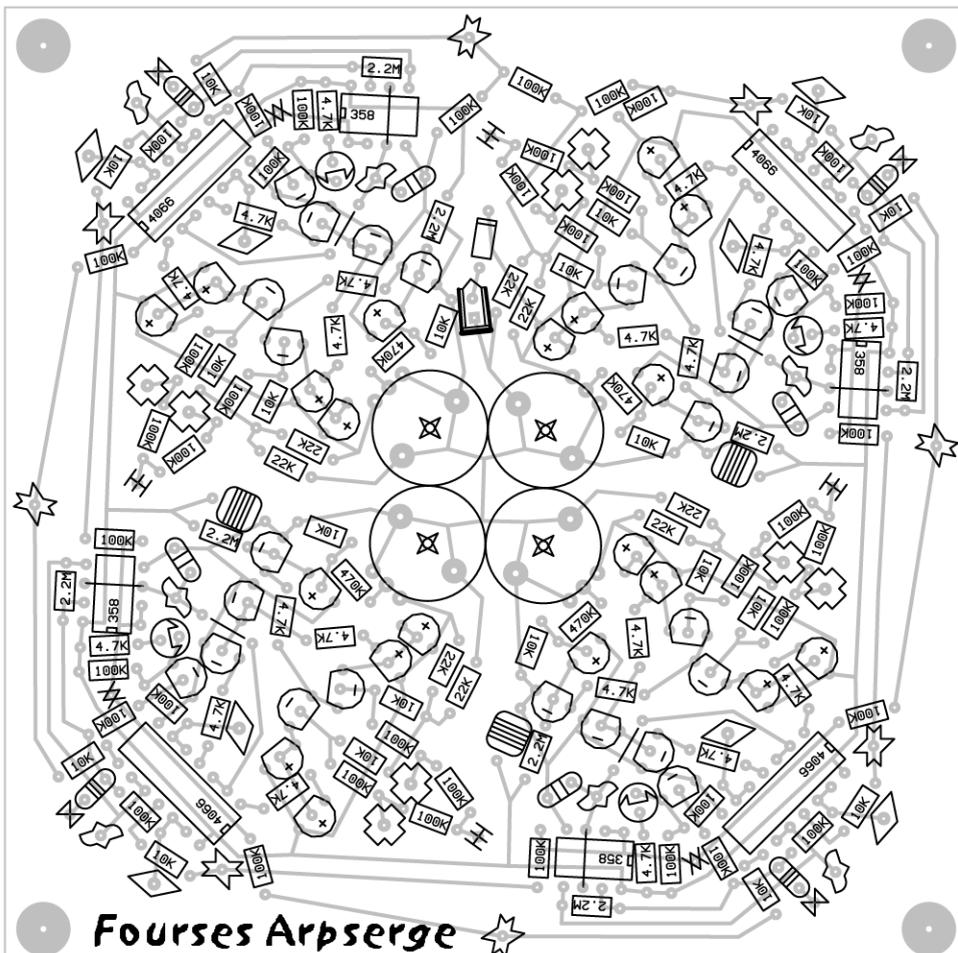


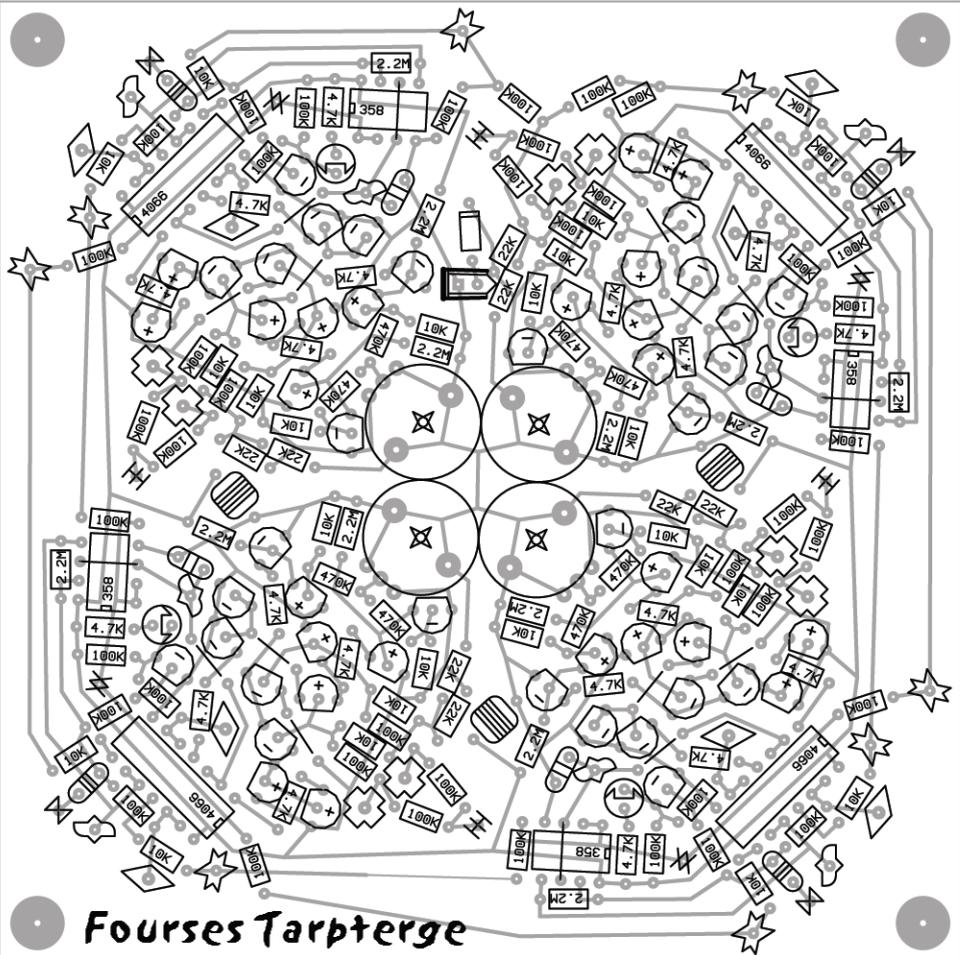
NJM2073



LM358

NOTE WIRE ACROSS TOP FROM PIN 3 TO PIN 6





Fourses Tarpterge

